



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,812	12/08/2003	Yu Chang Kim	40296-0041	9240
7590		05/17/2006	EXAMINER	
Heller Ehman LLP		GURLEY, LYNNE ANN		
1717 Rhode Island Avenue NW		ART UNIT		
Washington, DC 20036		PAPER NUMBER		
		2812		

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/728,812	Applicant(s) KIM ET AL.	
	Examiner Lynne A. Gurley	Art Unit 2812	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 April 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

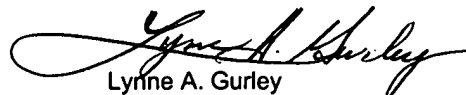
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 1-7.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
 13. ☐ Other: \ .


 Lynne A. Gurley
 Primary Patent Examiner
 Art Unit: 2812

Continuation of 11. does NOT place the application in condition for allowance because: In response to Applicant's remarks regarding the primary reference Chang failing to teach a third interlayer insulating film and that the modification of Chang by Liu would not be proper since Chang teaches that there are drawbacks to forming the etch stop layers between insulating layers, the MPEP states in section 2123 that "Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments." "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In section 2141.02 the MPEP also teaches that "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." Additionally, in section 2145, the MPEP states that "A prior art reference that 'teaches away' from the claimed invention is a significant factor to be considered in determining obviousness; however, 'the nature of the teaching is highly relevant and must be weighed in substance'. Upon considering the combination of references, the Examiner finds that although Chang discusses some drawbacks to using the etch stop layers, Chang still uses them in his structure, and has acknowledged their use in the prior art, as well as some positive reasons to use them (column 1, lines 35-50). Chang also points out the drawbacks to a very similar structure to his own in Fig. 1B. So, these examples do not seem to limit the prior art to structures which do not use multiple etch stops between insulating layers. The method in Chang seems to emphasize an overall objective of improving the dual damascene plasma etching process as stated in column 3, lines 1-8. The objective does not seem to emphasize producing a structure without etch stop layers. Since the etch stop layers are discussed in Liu as being useful for forming the structure, and positive reasons to use the etch stop layers have been recited in Chang as well, one of ordinary skill would reason that the etch stop layers may remain in the structure, and to solve the etching problem, the resist fill process of Chang and Liu may be used to overcome the difficulties addressed in each reference. In short, the addition of a third insulating layer and etch stops between layer does not prevent the structure from performing its desired function. Even Applicant acknowledges that the stacked structure is conventional in figures 1a-1e. It is the sequencing of the patterning events which appears to differ in Applicant's figures.